Child Marriage and Education: A Major Challenge
Minh Cong Nguyen and Quentin Wodon

Why Does Child Marriage Matter?

The issue of child marriage is getting renewed attention among policy makers. This is in part because child marriage remains highly prevalent despite efforts by many developing country governments to discourage and even outlaw the practice. It constitutes a violation of the rights of the girls who are forced to marry early, and it profoundly affects their life through substantially lower education prospects, health complications (such as vesico-vaginal fistulae, a higher likelihood of acquiring HIV/AIDS, and higher levels of infant mortality with early pregnancies), and higher risks of violence in the home as well as social exclusion.

On the basis of physiological and social criteria ii Given the importance of child marriage for development policy and especially education, this note summarizes the results of recent research carried by the Education Department of the World Bank on child marriage and education. The note has three objectives: (1) to provide new estimates of the extent of child marriage and whether it is decreasing rapidly or not over time; (2) to measure the impact of child marriage on drop-outs, literacy, and education attainment; and (3) to briefly suggest some of the policies that could be adopted in order to reduce child marriage.

How Widespread is Child Marriage and Is It Decreasing over Time?

How extensive is the practice of child marriage today? Table 1 from Nguyen and Wodon (2012b) provides data on trends in the incidence of child marriage for girls (the share of girls marrying before the age of 18), as well as in the child marriage gap (a measure which also factors in the number of years of early marriageiii). The estimates are based on data from 60 Demographic and Health Surveys. The region with the highest overall incidence of child marriage today, as estimated through the incidence of child marriage among women born between 1985 and 1989, is South Asia where 45.4 percent of women born between those years were married below the age of 18. Sub-Saharan Africa is next, with 38.5 percent of women born in those years marrying below the age of 18. The Middle East and North Africa region comes next, with an incidence of 31.5 percent, followed by Latin America and the Caribbean, East Asia and the Pacific, and finally Europe and Central Asia with substantially lower incidences.

It is widely acknowledged that child marriage is decreasing, but how rapidly? Table 1 shows that when comparing the incidence of child marriage between women born between 1985 and 1989 and women born between 1955 and 1959, the incidence of child marriage was reduced by 14.8 points in South Asia and 14.0 points in sub-Saharan Africa. The declines were lower in the other regions. When looking at income groups, the reduction in the incidence of child marriage was 14.1 points for low income countries and 11.9 points for lower middle income countries. As expected, the absolute reductions in the incidence of child marriage have in general been largest in countries where the incidence was initially highest. For all low income
and middle income countries as a whole for which DHS surveys are available, the incidence of child marriage was reduced by 10.8 percentage points from 51.2 percent among women born between 1955 and 1959 to 40.3 percent for women born between 1985 and 1989. Similar findings are obtained for the child marriage gap in terms of the comparison of regions and groups of countries with the largest decline over time. Thus, while progress has been made, the gains towards eliminating child marriage have been slow and much remains to be accomplished.

### Table 1: Trends in Child Marriage for Girls by Date of Birth and Group of Countries (%)

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<tbody>
<tr>
<td>South Asia</td>
<td>60.24</td>
<td>59.82</td>
<td>60.64</td>
<td>58.96</td>
<td>55.21</td>
<td>49.66</td>
<td>45.43</td>
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<tr>
<td>Sub-Saharan Africa</td>
<td>52.50</td>
<td>49.15</td>
<td>47.60</td>
<td>44.87</td>
<td>41.84</td>
<td>39.27</td>
<td>38.52</td>
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<tr>
<td>Income level</td>
<td></td>
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<tr>
<td>Low income</td>
<td>65.45</td>
<td>60.05</td>
<td>59.09</td>
<td>56.94</td>
<td>53.76</td>
<td>53.20</td>
<td>51.32</td>
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<tr>
<td>Lower middle income</td>
<td>49.32</td>
<td>48.47</td>
<td>48.17</td>
<td>45.80</td>
<td>42.58</td>
<td>38.38</td>
<td>37.43</td>
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<tr>
<td>World</td>
<td>51.20</td>
<td>49.20</td>
<td>48.55</td>
<td>46.43</td>
<td>43.42</td>
<td>40.13</td>
<td>40.34</td>
</tr>
</tbody>
</table>

Source: Nguyen and Wodon (2012b).

### How Large is the Impact of Child Marriage on Education?

Relatively few studies have attempted to carefully measure the impact of child marriage on education. The main difficulty is that the decision by a girl (or her parents) to marry early is likely to be itself a function of the girl’s education potential. For example, girls with lower education prospects because they may be weaker academically face smaller expected losses in future earnings and thereby have lower incentives to continue to study as compared to girls who are academically stronger. These girls may be more willing to marry early or their parents may be more inclined to have them marry early. Similarly, independently of their academic abilities, girls less interested in pursuing their education may also marry earlier and might have dropped out of school even in the absence of marriage. Because education and marriage decisions are jointly made, it is technically difficult (i.e., using proper statistical or econometric methods) to assess the impact of child marriage on education attainment.

Two approaches have been used in the literature to try to estimate the impact of child marriage on education. Table 2 provides a summary of a number of key studies in this area. The first approach consists in relying on the reasons mentioned by parents in surveys for why their children have dropped out of school. The share of drop-outs that appear to be due to child marriage or early pregnancies can then be computed. Using data from the late 1990s for Burkina Faso, Cameroon, Côte d’Ivoire, Guinea, and Togo, Lloyd and Mensch (2008) find that for girls aged 15 to 24, child marriage and pregnancies directly account for between 5% and 33% of drop-outs, depending on the country. Using similar data for Nigeria for 2006, Nguyen and Wodon
(2012c) find that child marriage (and to a much lower extent pregnancies) account for 15% to 20% of drop-outs, which is of the same order of magnitude. In addition, Nguyen and Wodon (2012c) also show that if child marriage and early pregnancies could be eliminated, this could potentially reduce the gender gap in education by about half.

The second (and better) approach relies on regression techniques with instrumental variables to explain the decision to marry, but not education outcomes conditional on the decision to marry. Field and Ambrus (2009) use variation in the timing of menarche (puberty) as the instrumental variable for the age at first marriage, given that in many cultural and religious traditions, including in Bangladesh, girls often are not allowed to marry before reaching puberty. They find that each additional year of delay in the age of marriage increases schooling by 0.22 year and the likelihood of literacy of 5.6 percentage points. Nguyen and Wodon (2012d) use the contemporaneous and past incidence of child marriage in the area where a girl lives as instruments, and also find that in Africa each year of early marriage reduces the probability of literacy by 5.6 percentage points, and the probability of secondary school completion by 6.5 points, with the impact on the probability of having at least some secondary education being slightly larger. Finally, using data from India and considering a measure of the fulfillment of the right to education recently adopted there, with 100 percent meaning that a girl has achieved at least nine years of schooling, Nguyen and Wodon (2012d) find that each year of early marriage reduces the fulfillment of the right to education measure by about 3.2 percentage points.

It is worth emphasizing that apart from the violation of human rights that child marriage often entails, and apart from the negative impact of child marriage on health and the risk of disempowerment for the girls who marry early, the fact that child marriage has a large impact on education attainment is likely to make programs and policies to reduce child marriage cost effective for promoting growth and poverty reduction. That is, given that the returns to secondary schooling tend to be large, the positive economic impact of a reduction in child marriage on growth and poverty reduction through education attainment is likely to be large.

### Table 2: Estimates of the Impact of Child Marriage on Education Attainment

<table>
<thead>
<tr>
<th>Reasons for dropping out</th>
<th>Probability of Literacy</th>
<th>Years of schooling</th>
<th>Some secondary school</th>
<th>Secondary school completed</th>
<th>Measure of the right to education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lloyd &amp; Mensch 2008</td>
<td>5 countries</td>
<td>5% to 33%</td>
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<tr>
<td>Nguyen &amp; Wodon 2012c</td>
<td>Nigeria</td>
<td>15% to 20%</td>
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<tr>
<td>Instrumental Variables</td>
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<td>Field &amp; Ambrus, 2009</td>
<td>Bangladesh</td>
<td>-5.6%/year</td>
<td>-0.22/year</td>
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<tr>
<td>Nguyen &amp; Wodon 2012d</td>
<td>Africa</td>
<td>-5.6%/year</td>
<td>-8.4%/year</td>
<td>-6.5%/year</td>
<td>-3.2%</td>
</tr>
<tr>
<td>Nguyen &amp; Wodon 2012e</td>
<td>India</td>
<td>-5.6%/year</td>
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Source: Compiled by the authors.

### What Can Be Done to Eliminate Child Marriage?

There is substantial evidence that child marriage is an important factor leading girls to curtail their education, even if it may not be the main factor. Given that the incidence of child marriage remains very high, combating child marriage is an important area for policy, not only in terms of the impact of child marriage on education, but also in terms of its health and social impacts, and the need to guarantee the right for girls not to marry early if they do not want to.
What can be done? In many countries, laws have been adopted to prevent marriage below 18 years of age, but these laws are often not well enforced. The laws are needed, but they are not enough. Interventions to reduce the cost of schooling and improve quality show more promise. The causality between child marriage and education indeed goes both ways. Child marriage reduces a girl’s education prospects, but a lack of education opportunities or education of low quality together with limited employment prospects for better educated girls are some of the factors that leads to child marriage as well. This is why apart from recommending an international summit on child marriage and the adoption of national strategies for eliminating child marriage, Brown (2012) suggests to look at ‘tipping-point’ policies in education, including programs to reduce the cost for girls to transition from primary to secondary school.

On interventions which may help to reduce the cost of schooling for girls, traditional conditional cash transfers are often mentioned. These transfers may reduce marriage indirectly through the effect of increased schooling on marriage, but the impact on schooling must then be large to obtain a substantial indirect effect on child marriage. Other education interventions, such as better proximity of secondary schools, public transportation to go to schools, and more generally improvements in the quality of schooling so that the incentives for girls to enroll are higher, may also have beneficial indirect effects on child marriage. Given the broader economic impetus for many early marriages, some forms of unconditional transfers could also be successful to reduce child marriage. Another alternative could be to condition transfers on not getting married, with some programs suggesting positive impacts. For example, in rural Ethiopia the Berhane Hewan program focuses on income earning projects for families sending their daughters to school and a pregnant ewe is presented to the girl and her family at graduation (Erulkar and Muthengi, 2007, 2009).

It is also important to emphasize that reframing the transition of girls to marriage requires a policy dialogue with religious and community leaders who have a great deal of influence on those issues. Meeting with these leaders to critically examine the causes and consequences of early marriage can help in building support for policies against child marriage. In some countries, as appropriate, this dialogue can be part of broader discussions on family law reform.

Good and safe job opportunities for girls would also likely have a substantial effect on teen marriage and pregnancy in many settings. In addition, better access to basic infrastructure (water, electricity) may help free up time spent by girls doing domestic chores, and facilitate their schooling. Together with the fact that traditions and culture play an important role in the persistence of early marriage (among others through rules governing dowry in some countries), these brief discussion suggests that eliminating child marriage requires a cross-sectoral policy agenda that goes beyond education policies and programs alone, but education is a good start.

Resources


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i The authors are with the World Bank. This work is part of a broader study on child marriage in sub-Saharan Africa funded by the Trust Fund for Environmentally and Socially Sustainable Development (TFESSD) at the World Bank. The opinions expressed in the paper are however only those of the authors, and need not represent those of the World Bank, its Executive Directors, or the countries they represent.

ii The criteria are (1) the physiological maturation of the body; (2) the cognitive capacity for making safe, informed, and voluntary decisions; and (3) institutionalized concepts of "old enough" for consent to sexual intercourse and marriage as reflected in legal frameworks and international standards.

iii Most studies on child marriage report its incidence and other measures such as the median age of marriage. Measures that would better take into account how young girls marry are often not provided, and no tests are carried to assess the robustness of comparisons of age at marriage between countries, groups within countries, or time periods, for example with respect to the age threshold used to identify child marriage or the specific measure relied upon to measure child marriage. Nguyen and Wodon (2012a) suggest that better measurement of child marriage can be obtained by adopting techniques used for the measurement of poverty. The child marriage gap reported in table 1 is similar to the poverty gap in the poverty literature in that it takes into account not only the incidence of child marriage, but also its depth in terms of the number of years of early marriage. Higher order measures of child marriage such as the squared child marriage gap can also be used, and tests for dominance can be performed.